

COPY

PATENT
ATTORNEY DOCKET NO: 07072/073001

COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled MULTI-VOLUME EXTENT BASED FILE SYSTEM, the specification of which

- is attached hereto.
 was filed on _____ as Application Serial No. _____ and was amended on _____.
 was described and claimed in PCT International Application No. _____ filed on _____ and as amended under PCT Article 19 on _____.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose all information I know to be material to patentability in accordance with Title 37, Code of Federal Regulations, §1.56.

I hereby appoint the following attorneys and/or agents to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: Gary A. Walpert, Reg. No. 26,098; John F. McCabe, Reg. No. 42,854; Eric L. Prahl, Reg. No. 32,590; John F. Hayden, Reg. No. 37,640.

Address all telephone calls to Gary A. Walpert at telephone number 617/542-5070.

Address all correspondence to Gary A. Walpert, Fish & Richardson P.C., 225 Franklin Street, Boston, MA 02110-2804.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

Full Name of Inventor: Preston F. Crow

Inventor's Signature: Preston F. Crow Date: 27 April 1999

Residence Address: Ashland, MA

Citizen of: United States

Post Office Address: 41 Rockland Drive, Ashland, MA 01721

COMBINED DECLARATION AND POWER OF ATTORNEY CONTINUED

Full Name of Inventor: Robert S. Mason, Jr.

Inventor's Signature: R.S. Mason Jr.

Date:

4/27/99

Residence Address: Mendon, MA

Citizen of: United States

Post Office Address: 4 Mowry Street, Mendon, MA 01756

Full Name of Inventor: Steven T. McClure

Inventor's Signature: ST. McClure

Date:

4/27/99

Residence Address: Northboro, MA

Citizen of: United States

Post Office Address: 142 East Main Street, Northboro, MA 01532

Full Name of Inventor: Susan C. Nagy

Inventor's Signature: S. C. Nagy

Date:

4/27/99

Residence Address: Waltham, MA

Citizen of: United States

Post Office Address: 25 Clark Street, Waltham, MA 02453

Full Name of Inventor: Richard G. Wheeler

Inventor's Signature: B. Wheeler

Date:

4/27/99

Residence Address: Belmont, MA

Citizen of: United States

Post Office Address: 61 Winslow Road, Belmont, MA 02478



EMC-99-027
07072/42400;
Rec'd 3/2/00
UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

FEBRUARY 14, 2000

FISH & RICHARDSON P.C.
GARY A. WALPERT
225 FRANKLIN STREET
BOSTON, MA 02110-2804

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Feb 28 2000

FISH & RICHARDSON, P.C.
BOSTON OFFICE

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UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 11/10/1999

REEL/FRAME: 010375/0343

NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNEE'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNEE:

CROW, PRESTON F.

DOC DATE: 10/18/1999

ASSIGNEE:

MASON, ROBERT S., JR.

DOC DATE: 10/18/1999

ASSIGNEE:

MCCLURE, STEVEN T.

DOC DATE: 10/19/1999

ASSIGNEE:

NAGY, SUSAN C.

DOC DATE: 10/18/1999

ASSIGNEE:

WHEELER, RICHARD G.

DOC DATE: 10/18/1999

ASSIGNEE:

EMC CORPORATION
171 SOUTH STREET
HOPKINTON, MASSACHUSETTS 01748

* No Docketing Required *	
Reviewed by Practice Systems	
Initials:	<i>[Signature]</i>
Reviewed by Billing Secretary	
Initials:	<i>[Signature]</i>

010375/0343 PAGE 2

SERIAL NUMBER: 09301177
PATENT NUMBER:

FILING DATE: 04/28/1999
ISSUE DATE:

MAYA BENNETT, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

11-16-1999

Attorney Docket No.: 07072/924001

MNR 11/10/99

Assistant Commissioner for Patents: P



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1. Name of conveying party(ies):

Preston F. Crow, Robert S. Mason, Jr., Steven J. O'Neil, T. McClure, Susan C. Nagy and Richard G. Wheeler

2. Name and address of receiving party(ies):

EMC Corporation
171 South Street
Hopkinton, MA 01748Additional name(s) attached? Yes No

3. Nature of conveyance:

- Assignment
- Merger
- Security Agreement
- Change of Name
- Other:

Additional names/addresses attached? Yes No

Execution Date: October 18 and 19, 1999

4. Application number(s) or patent number(s):

If this document is being filed with a new application, the execution date of the application is: April 27, 1999
A. Patent Application No.(s): 09/301,177

B. Patent No.(s):

Additional numbers attached? Yes No

5. Name/address of party to whom correspondence concerning document should be mailed:

Gary A. Walpert
 Fish & Richardson P.C.
 225 Franklin Street
 Boston, MA 02110-2804

6. Total number of applications/patents involved: 1

7. Total fee (37 CFR 3.41): \$40

- Enclosed
- Authorized to charge deposit account

8. Deposit account number: 06-1050

If the fee above is being charged to deposit account, a duplicate copy of this cover sheet is attached. Please apply any additional charges, or any credits, to our Deposit Account No. 06-1050.

DO NOT USE THIS SPACE

9. Statement and signature: To the best of my knowledge and belief, the foregoing information is true and correct and the attached is the original document.

John F. McCabe
Name of Person SigningReg. No. 42,854
Signature11/5/99
Date

Total number of pages including cover sheet, attachments, and document: 4

11/16/1999 DCODES 00000028 09301177

01 FC:581

40.00 OP

Date of Deposit

I hereby certify under 37 CFR 1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

Dense M. Brownson

ASSIGNMENT

COPY

For valuable consideration, we, Preston F. Crow, of Ashland, MA; Robert S. Mason, Jr. of Mendon, MA; Steven T. McClure of Northboro, MA; Susan C. Nagy of Waltham, MA and Richard G. Wheeler of Belmont, MA hereby assign to EMC Corporation, a Massachusetts corporation having a place of business at 171 South Street, Hopkinton, MA 01748, and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest, including, without limitation, the right to sue for past infringement, throughout the world in the inventions and improvements, which are subject of an application for United States Patent signed by us, entitled MULTI-VOLUME EXTENT BASED FILE SYSTEM, filed April 28, 1999, and assigned U.S. Serial Number 09/301,177, and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, and design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

IN WITNESS WHEREOF, I hereto set my hand and seal at 171 South St. Hopkinton, MA, this 18th day of Oct., 1999


Preston F. Crow

L.S.

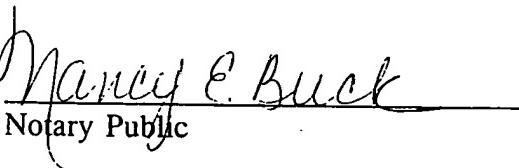
STATE OF Massachusetts:

:ss.

COUNTY OF Middlesex:

Before me this 18th day of October, 1999, personally appeared

Preston F. Crow known to me to be the person whose name is subscribed to the foregoing Assignment, and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained.

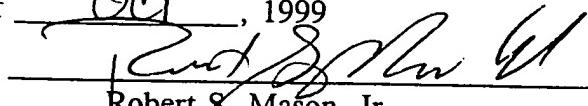

Nancy E. Buck
Notary Public

My Commission Expires:

[Notary's Seal Here]

NANCY E. BUCK
Notary Public
My Commission Expires Sept 4 2003

IN WITNESS WHEREOF, I hereto set my hand and seal at 171 South St. Hopkinton, MA
this 18 day of Oct, 1999


Robert S. Mason, Jr.

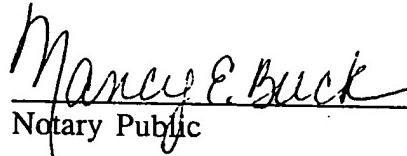
L.S.

STATE OF Massachusetts:

COUNTY OF Middlesex :ss.

Before me this 18th day of October, 1999, personally appeared

Robert S. Mason, Jr. known to me to be the person whose name is subscribed to the foregoing Assignment, and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained.


Nancy E. Buck
Notary Public

My Commission Expires:

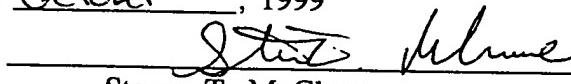
NANCY E. BUCK

Notary Public

My Commission Expires Sept. 4, 2003

[Notary's Seal Here]

IN WITNESS WHEREOF, I hereto set my hand and seal at 171 South Street Hopkinton MA,
this 19th day of October, 1999


Steven T. McClure

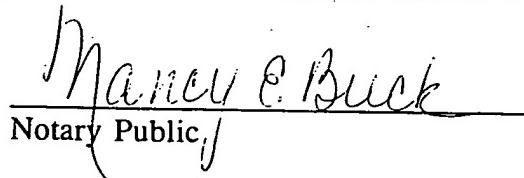
L.S.

STATE OF Massachusetts

COUNTY OF Middlesex :ss.

Before me this 19th day of October, 1999, personally appeared

Steven T. McClure known to me to be the person whose name is subscribed to the foregoing Assignment, and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained.


Nancy E. Buck
Notary Public

My Commission Expires:

[Notary's Seal Here]

NANCY E. BUCK

Notary Public

My Commission Expires Sept. 4, 2003

IN WITNESS WHEREOF, I hereto set my hand and seal at Hopkinton,
this 18 day of Oct, 1999

S C Nagy
Susan C. Nagy

L.S.

STATE OF Massachusetts:

COUNTY OF Middlesex: ss.

Before me this 18th day of October, 1999, personally appeared

Susan C. Nagy known to me to be the person whose name is subscribed to the foregoing Assignment, and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained.

Nancy E. Buck
Notary Public

[Notary's Seal Here]

My Commission Expires:

NANCY E. BUCK
Notary Public
My Commission Expires Sept. 4, 2003

IN WITNESS WHEREOF, I hereto set my hand and seal at Hopkinton, MA,
this 18th day of October, 1999

Richard G. Wheeler
Richard G. Wheeler

L.S.

STATE OF Massachusetts:

COUNTY OF Middlesex: ss.

Before me this 18th day of October, 1999, personally appeared

Richard G. Wheeler known to me to be the person whose name is subscribed to the foregoing Assignment, and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained.

Nancy E. Buck
Notary Public

[Notary's Seal Here]

My Commission Expires:

NANCY E. BUCK
Notary Public
My Commission Expires Sept. 4, 2003